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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,134	01/25/2002	Satoshi Tazaki	020085	8160

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EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,134

Applicant(s)

TAZAKI, SATOSHI

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claims 3 and 12 are objected to because of the following informalities: "dyn/cm" should be "dyne/cm". Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-6, 8 and 12 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 6,069,196 to Akao et al.

Akao teaches a molded article which is also a container body for a photographic film formed of a polyethylene resin composition and an alicyclic carboxylic acid amide compound of a divalent or polyvalent aliphatic amine, or a combination thereof (equivalent to an alicyclic

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structure-containing polymer) as in patented claim 12. The molded article contains an ink pattern as Akao expresses at col. 30, lines 22-28 stating the molded article may be provided with letters and marks with print (equivalent to ink layer of dots or lines) in order to improve the value as commercial goods. The ink used for printing them can be selected from harmless inks to photosensitive materials among conventional inks for offset printing, inks for gravure printing or UV inks. Akao continues to explain at col. 30, lines 28-56, the ink composition is of acrylic resins, meeting instant claim 5.

At col. 14, lines 6-15, the ink functions as a light-shielding material by including inorganic pigments and metal powders. Such ink is a functional equivalent of the "light-reflecting" property as expressed in instant claim 6. See also col. 29, lines 40-45.

While Akao does not expressly disclose the retention selection subjected to tape peeling adhesion test having a value of at least 80% as recited in instant claim 1, it has been held that an element that is "being able to" perform a function (e.g. a 1-cm² selection subjected to tape peeling adhesion) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138. Moreover, any property instantly claimed (e.g. peeling adhesion of at least 80% and index of wetting of at most 42 dyne/cm-instant claims 3 and 12) is an inherent property as the same materials are used, absent any evidence of the contrary.

5. Claims 4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,069,196 to Akao et al. in view of USPN 5,437,926 to Takahashi et al.

6. Akao essentially teaches the claimed invention, as explained above. Akao does not teach the alicyclic structure being a norbornene polymer (claim 9), that it is a hydrogenated ring-

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opening polymer of a norbornene monomer (claim 10), composed of a tetracyclododecene or dicyclopentadiene (claim 11). However, Takahashi teaches a molded article having the aforementioned norbornene type polymer structure at col. 3, lines 30-45, col. 4, lines 1-55, col. 5, lines 5-10, and col. 8, lines 55-50. Hence, it would have been obvious to one of ordinary skill in the art to modify the molded article of Akao to include a norbornene polymer of a dicyclopentadiene type polymer because Takahashi teaches such polymers are used for molded or formed material making it possible to form a hard coat layer having greatly improved adhesion strength to a surface of thermoplastic saturated norbornene polymer molded article at col. 3, line 24-col. 4, line 50.

7. Akao does not teach an ink layer is at most 100 microns as instant claim 4. However, it would have been obvious to one of ordinary skill in the art to produce a thickness of an ink layer that is at most 100 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

8. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,069,196 to Akao et al. in view of JP Abstract 08-094852 to Hironobu.

9. Akao essentially teaches the claimed invention, as explained above. Akao does not teach the invention used a light guide for back light in a liquid crystal display (LCD). However, Hironobu teaches a light transmission plate for LCDs where the plate is of a thermoplastic norbornene based resin since the resin has high transparency, optical uniformity and excellent heat and moisture resistance as taught in the abstract of Hironobu. Hence, it would have been obvious to one of ordinary skill in the art to modify the molded article of Akao to further use it as a light guide for LCDs since Hironobu teaches a suitable functional equivalent for the purpose of

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providing high transparency, optical uniformity and excellent heat and moisture resistance as taught in the abstract of Hironobu.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. USPN 6,024,455 to O'Neill et al. teaches an indicia layer 12 which is laminated or bonded to adjacent layers 14 and 16. Layer 12 can alternatively or in addition include a film of ink or other suitable pigment applied to layer 14 or 16 by known printing techniques. Patterned retroreflective layer are taught such as patterned coatings of paint, or inks. Also reflected light 46 carries the patterned information contained in indicia layer 40. Patterns are defined in the structured surface by zones where a mold is used to make the layer have smooth surfaces corresponding to those zones.

b. USPN 6,077,879 to Ohtsuki et al. teaches a curable resin being molded and also may be used as an ink.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

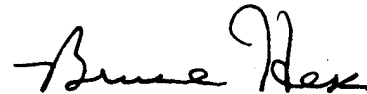
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus
Examiner
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July 9, 2003

A handwritten signature in black ink, appearing to read "Bruce Hess". The signature is fluid and cursive, with a large, stylized "H" and "S".

BRUCE H. HESS
PRIMARY EXAMINER